

4201 East Arkansas Avenue, Room 262 Denver, CO 80222-3400 (303) 757-9793

MEMORANDUM

DATE: December 8, 2016

TO: Transportation Commission

FROM: Maria J. Sobota, Chief Financial Officer

SUBJECT: Sixth Supplement - FY 2016-17

The project request included in the Supplement is consistent with the FY 2017 through FY 2020 STIP. Funds are available from the Regions' allocations unless otherwise indicated.

Per Transportation Commission direction, Emergency Relief project updates are included in the Budget Supplement.

Transportation Commission 6th Supplement FY 2016-17 December 2016 Page 2 of 6

RAMP

Region 1

\$241,748 - TRAFFIC SIGNAL CONTROLLER REPLACEMENT-RAMP Operations Contingency- Additional funds needed for project award.

TRAFFIC SIGNAL CONTROLLER REPLACEMENT

Budget Components by Phase, Funding Program, Fiscal Year

			Supplement Action						
Phase	Funding	Current	Year of Budget			Total	Percent	Revised	Expended
of Work	Program	Budget	FY 2017	FY 2018	FY 2019	Request	Increase	Budget	To-Date
Design	Highway Safety Improvement	\$87,078	\$0	\$0	\$0	\$0		\$87,078	\$72,424
	Total Design	\$87,078	\$0	\$0	\$0	\$0		\$87,078	\$72,424
Utilities	RAMP Operations	\$124,000	(\$124,000)	\$0	\$0	(\$124,000)		\$0	\$0
	Total Utilities	\$124,000	(\$124,000)	\$0	\$0	(\$124,000)		\$0	\$0
Construction	RAMP Operations	\$848,924	\$365,748	\$0	\$0	\$365,748		\$1,214,672	\$0
	Total Construction	\$848,924	\$365,748	\$0	\$0	\$365,748		\$1,214,672	\$0
Total Project Budget \$1,060,00		\$1,060,002	\$241,748	\$0	\$0	\$241,748	23%	\$1,301,750	\$72,424
			Year of Expenditure		Total				
			FY 2017	FY 2018	FY 2019	Request			
			\$241.748	\$0	\$0	\$241.748			

This item is being included in the Supplement per PD703.0 as the increase is above the 7.5% and \$100,000 threshold for RAMP projects.

Refer to memo for more information.

Transportation Commission 6th Supplement FY 2016-17 December 2016 Page 3 of 6

COLORADO DEPARTMENT OF TRANSPORTATION

STATE OF COLORADO

Sixth Supplement

Fiscal Year 2016-2017

Dated: December 8, 2016

COLORADO DEPARTMENT OF TRANSPORTATION STATE OF COLORADO

RESOLUTION NO. TC –

"BE IT RESOLVED, That the Sixth Supplement to the Fiscal Year 2016-2017 Budget be approved by the Commission"

Transportation Commission Contingency Reserve Fund Reconciliation Sixth Supplement FY 2017 Budget

Transaction		J		Reference
Date	Transaction Description	Amount	Balance	Document
June-16	Ending Balance 12S16		\$79,876,372	
July-16	Balance 1S17		\$89,842,565	
August-16	Balance 2S17		\$76,456,318	
September-16	Balance 3S17		\$154,235,405	
October-16	Balance 4S17		\$147,905,203	
November-16	Balance 5S17		\$150,836,919	
	state match for ER permanent repair projects	\$ (368,481)		See Emergency Repair Items
December-16	Pending Balance 6S17		\$150,468,438	

Transportation Commission Contingency Snow & Ice Fund Reconciliation Sixth Supplement FY 2017 Budget

Transaction				Reference
Date	Transaction Description	Amount	Balance	Document
	FY17 Budget Allocation	\$10,000,000		1000223849
July-16	Balance 1S17		\$10,000,000	
August-16	Balance 2S17		\$10,000,000	
September-16	Balance 3S17		\$10,000,000	
October-16	Balance 4S17		\$10,000,000	
November-16	Balance 5S17		\$10,000,000	
December-16	Pending Balance 6S17		\$10,000,000	

Transportation Commission Contingency RAMP Reserve Sixth Supplement FY 2017 Budget

Transaction

Date	Transaction Description	Amount	Balance
June-16	Balance 12S16		\$1,619,839
July-16	Balance 1S17		\$1,619,839
August-16	Balance 2S17		\$1,619,839
September-16	Balance 3S17		\$1,619,839
October-16	Balance 4S17		\$1,619,839
November-16	Balance 5S17		\$1,619,839
December-16	Pending Balance 6S17		\$1,619,839

Transportation Commission Contingency Reserve Fund

Emergency and Permanent Repairs-Nonparticipating costs and state match

September 11, 2013 Flood Related Monthly Activity

	State					Total	l Budget
Reg	Highway	Milep	osts	Project Description	County	TO	CCRF
4	066B	46.470 -	47.150	PR SH66B Permanent Flood Repairs	Weld	\$	(230)
				Total		\$	(230)

			Spring 2015 Flood Related Monthly Acti	vity		
	State				To	tal Budget
Reg	Highway	Mileposts	Project Description	County	1	TCCRF
4			PRLA Mill St. Overlay in Brush	Morgan	\$	(360,098)
2			PRLA North Creek Rd South (CU212C)	Pueblo	\$	(1,178)
2			PRLA North Creek Rd North (CU212A)	Pueblo	\$	(1,167)
2			PRLA Overton Rd	Pueblo	\$	(5,808)
			Total		\$	(368,251)
	G	rand Total TCC	CRF Activity for Emergency Relief Since L	ast Reporting	\$	(368,481)



FY 2016-2017 Contingency Balance Projection							
November TC Contingency Balance	\$150,836,919						
State Match & Advance Funding for ER and Permanent Flood Repairs	(\$3	68,481)					
Pending December TC Contingency Balance	\$150,468,438						
Projected Inflow:	High Estimate	Low Estimate					
Allocation of Federal ER Funds for FY15 Flood	\$3,500,000	\$0					
Projected Outflow:	Low Estimate	High Estimate					
State Match for Emergency Relief/Permanent Recovery	(\$4,500,000)	(\$9,500,000)					
Right of Way Acquisitions	(\$12,500,000)	(\$20,000,000)					
State Match for Spring 2015 Floods	\$0	(\$2,500,000)					
FY16-17 Estimated Misc TCCRF Funding Requests	(\$12,000,000)	(\$12,000,000)					
Projected FY 2015-2016 YE Contingency Balance	\$124,968,438	\$106,468,438					
TCCRF Surplus (Deficit) to Reach \$40M Balance July 1, 2017	\$84,968,438	\$66,468,438					

2000 S. Holly St. Denver, CO 80222

MEMORANDUM

TO: TRANSPORTATION COMMISSION

FROM: JOSHUA LAIPPLY, P.E., CHIEF ENGINEER

MARIA SOBOTA, CHIEF FINANCIAL OFFICER

JANE FISHER, P.E., PMO DIRECTOR

CC: PAUL JESAITIS, RICHARD ZAMORA

DATE: DECEMBER 8, 2016

SUBJECT: REQUEST TO FUND RAMP PROJECT FOR NEW TRAFFIC SIGNAL CONTROLLERS IN DENVER

METRO

Purpose

Region 1 is requesting approval to fund RAMP project for new traffic signal controllers in Denver metro.

Action

Per P.D. 703.0, staff is requesting Transportation Commission (TC) approval to budget \$1,301,748 for RAMP project for new traffic signal controllers in Denver metro. TC approval is requested because the low bid is approximately 23% above the previously approved project budget (\$1,301,748 vs. \$1,060,000) with the difference requested to be funded using RAMP Operations contingency (\$241,748).

Project Background

The original RAMP project included traffic signal infrastructure upgrades at 110 intersections along 6 congested corridors (Arapahoe Road (SH88), Wadsworth Boulevard (SH121), Santa Fe Drive (US 85), Federal Boulevard (US 287),120th Avenue (US 287), and 120th Avenue (SH128) and was approved at a budget of \$1,060,000. The upgrades were also planned to include blue tooth readers and cameras on arterial routes of significance.

Details

This project includes upgrades to existing traffic signal controllers along congested corridors in the Denver metro area by replacing controllers that are functionally obsolete and difficult to program with modern technology. The new Ethernet based controllers will enable technology to be efficiently and effectively leveraged to reduce congestion. They will also enable a transition away from the current fiber optic cable based traffic controller system that has reached capacity in many areas.

This project was originally planned to initiate the process of replacing existing outdated controllers on the most congested highways first which included (in order of prioritization):

- 1. Arapahoe Road (SH 88) from I-25 to Parker Road 12 Signal
- 2. Wadsworth Boulevard (SH 121) from US 36 to Deer Creek Canvon 55 Signals
- 3. Santa Fe Drive (US 85) from Blakeland Drive to Dartmouth Avenue 5 signals
- 4. Federal Boulevard (US 287) from 54th Ave. to 120th Avenue 23 Signals

- 5. 120th Avenue (US 287) from Lowell Blvd. to Nickel St.- 9 Signals
- 6. 120th Avenue (SH 128) from Zuni Street to Melody Street 4 Signals

Project bids were submitted on November 16, 2016 and came in higher than the originally approved budget of \$1,060,000. Based on the bid results, the project team has made the decision to reduce the scope to only include the first three corridors (72 intersections) and eliminate blue tooth readers as they are no longer required given recently CDOT has purchased travel time data from INRIX. This results in a funding request of \$1,301,748 and will reduce RAMP Operations contingency to \$2,212,724.

Key Benefits

Key benefits of the project include:

- 1. Leveraging modern technology to reduce congestion through the use of traffic controllers that are equipped with adaptive/responsive operation, Ethernet compatibility, railroad preemption, and flashing yellow capabilities.
- 2. Improved utilization of existing fiber optic communications infrastructure by freeing up capacity.
- 3. Enhanced monitoring of real-time traffic conditions leading to more accurate travel time estimates and delay reporting.

Options

- 1) Approve Region 1's request for \$1,301,748 including \$241,748 in RAMP Operations contingency. (Staff Recommendation)
- 2) Request that the Region further reduce scope to reduce funding request or identify Region funds to make up the shortfall.
- 3) Decline the request for additional funding.

Next Steps

Upon approval of the funding request, the Region will begin construction of the new traffic signal controllers.

